



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,960	06/25/2003	Joe P. Crookham	P04049US2	3716
22885	7590	01/22/2010	EXAMINER	
MCKEE, VOORHEES & SEASE, P.L.C.			DOAN, KIET M	
801 GRAND AVENUE				
SUITE 3200			ART UNIT	PAPER NUMBER
DES MOINES, IA 50309-2721			2617	
			NOTIFICATION DATE	DELIVERY MODE
			01/22/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patatty@ipmvs.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/603,960	<b>Applicant(s)</b> CROOKHAM ET AL.
	<b>Examiner</b> KIET DOAN	<b>Art Unit</b> 2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 10 December 2009.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,2,4,5,8,10,13-25,45,46 and 48-54 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1,2,4,5,8,10,13-25,45,46 and 48-54 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_

#### **DETAILED ACTION**

##### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/10/2009 has been entered.

- No claims are amended.

##### ***Response to Arguments***

Applicant's arguments filed 12/10/2009 have been fully considered but they are not persuasive.

Applicant's argument with respect to claims 1 and 45 is that the combination of prior art does not reject the inventive claims and teaches away from the present application.

The examiner respectfully disagrees for the following reason:

Firstly, the examiner must give each claim its broadest, reasonable interpretation.

1) Alt et al. clearly teach remotely (wireless) controlling the electric power to a plurality of electric devices with predetermined on and off time as Fig.2 clearly described

the lighting control computer 21 as read on (off-site central controller) that transmitting database or program as read on (database of events) for controlling the billboard lights 10 to turn ON and OFF during past 24 hours. "5:00am turn ON and 10:00pm turn OFF"... wherein the billboard 10 can be very diverse location, along highway and often in very remote places (see Col. 3, lines 13-20, Col. 6, lines 60-67, Col.10, Lines 5-40, Col.11, lines 45-51).

2) Gordin et al. is put forth to meet the limitation "plurality of arrays of lighting fixtures (Col.3, lines 60-61, fig.1 and fig.3, show plurality of lighting array 22 contain plurality of luminaries unit lights) and each array comprising a set of high intensity light sources and ballast circuits adapted to be switched to connect or disconnect to a relatively high voltage power source" (Col. 2, lines 55-67, Col. 3, lines 55- 62, Col. 4, lines 55-65 teach power source on board generator 16 and ballasts 18 contains circuitry for provide power to an array of luminaries units wherein each lighting assembly unit can be controlled to turn ON or OFF).

Applicant's argument with respect to claims 2, 16, 46 and 54 is that the combination of prior art does not reject "wherein the database comprises a schedule of events".

The examiner respectfully disagrees, the claim language are written in a broad fashion way and does not empirically define what schedule of events MUST be, but only described in the remark as a "nonrecurring lighting on or off for each lighting zone and recurring lighting on and off function for each zone, including date". Therefore, the

Art Unit: 2617

examiner rejection is based on claim language as written "wherein the database comprises a schedule of events" (Col.10, lines 5-40 teach the billboard control unit 16 received programming (database) with scheduling time to turn on and off as read on schedule of events).

Applicant's argument with respect to claims 8, 19 and 48 is that the rejection is error.

The examiner has modified his rejection using the same reference to address the Applicant's Remarks that Gordin et al. clearly teaches wherein the wide-area lighting device comprises sports lighting or security lighting (Col.1, lines 17-18, and Fig.1 show lighting device 10 which would lead to one skill to take into account that can be use for sport event or security lighting or any activity in night time).

Applicant's argument with respect to claims 13, 17, 18, 20 and 50 is that the prior art does not teach how to use the cellular communication system to accomplish the result or not fully enable the disclosure.

The examiner respectfully disagrees and confuse by the applicant's remarks. In 455 class of telecommunication, the cellular communication is a wireless/radio transmitting signals/frequency using cellular phone, satellite or base station, etc., further, Alt et al. clearly teaches "wherein the remote device includes a cellular receiver" (Col. 12, Lines 38-47, Fig.2, Illustrate wireless transceiver between lighting control

computer 21 having antenna 20/122 communicated (wireless) with control unit 16 having antenna 30/120).

Applicant's argument with respect to claim 15 is that the prior art does not teach "wherein said instructions include one or more of the set comprising turn on, turn off".

The examiner respectfully disagrees and maintain his rejection that Alt et al. clearly teaches "wherein said instructions include one or more of the set comprising turn on, turn off" (Col.10, lines 5-18 teach the control unit 16 received programming from lighting control computer 21 that cause the sign board to turn on and off).

Applicant's argument with respect to claims 21, 22 and 23 is that the cited reference rejection does not meet the limitations of these claims such as "a component to revise said database".

The examiner respectfully disagrees and maintain his rejection of claims 21, 22 and 23 that Alt et al. clearly teaches "a component to revise said database" (Col.3, lines 50-61, Col. 10, Lines 5-8, Col. 11, Lines 10-25 teach programming send to billboard daily at certain time and reference events (standard time to daylight saving time as read on revise) which widely divergent location to operate in according with individual protocol assigned to each billboard sign which is broadly read and meet the claim limitation. However, claim 25 has been modified and group with claims 10, 24, 25 and 49).

Applicant's argument with respect to claim 51 is that the prior art does not teach the limitation "wherein said data relates to instructions regarding the operation of an electrical load".

The examiner respectfully disagrees and maintains the rejection of Alt et al. clearly teaches "wherein said data relates to instructions regarding the operation of an electrical load" (Col. 6, Lines 30-41, 60-67, Col.10, lines 5-20 teach the control system such as lighting controlling computer communicated with the control unit by transmitting program instruction regarding operation of billboard light or electrical load).

Applicant's argument with respect to claim 53 is that the prior art does not teach consumer directly communicate with the scheduling device.

The examiner respectfully disagrees and modify his rejection using same prior art that Alt et al. clearly teaches "wherein the customer device communicates schedules related to operation of the lighting devices (Col.3, lines 55-67 teach billboard light belong to "owner" as read on consumer device that want to continue scheduling the operation of lighting the device or not until the new advertise secure).

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 5, 10, 13-17, 19-25, 45, 46, 49-52, 54 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Alt et al. (US 5,898,384) in view of Gordin et al. (US 4,712,167).

Regarding **claims 1 and (45** a system for remote control). Alt teaches an apparatus for centrally controlling a-wide-area lighting at a plurality of remote, widely-dispersed different sites to be illuminated comprising:

a) a plurality of wide area lighting systems each on-site at a different site, each on-site wide area lighting system comprising (Abstract, Col. 5, Lines 32-45 teach controlling system for remotely controlling plurality of electrical device, Col. 7, Lines 45-60 further teach the plurality of different site such as sign boards lighting, parking lot lighting located thousands mile apart which teach in Col. 3, Lines 13-20).

b) a central control system comprising:  
i. an off-site central controller including a database of events (Col.3, lines 13-20, Col.6, lines 60-67, Col.10, Lines 5-40, Col.11, lines 45-51, Fig.2, Illustrate control computer 21 which read on off-site central controller wherein located off-site that transmitting the program/database of event such as time turn on and off to control the lighting of sign board 10) or conditions related to arrays of each wide-area lighting system and a component adapted to issue data related to a function of the corresponding wide-area lighting system and an event or condition for the wide-area

lighting system or an array of the lighting system; the database of events or conditions for each wide-area lighting system being changeable at the off-site central controller;

ii. an on-site remote device controller for each wide-area lighting system, the remote controller operably connected to each set of light sources and ballast circuits of arrays of the wide-area system (Col.10, Lines 5-60, Fig.1, Illustrate control unit 16 which read on "on-site remote device controller" wherein connected to each light source, further described in Fig.2) ;

iii. a communication link to communicate the data from the central controller to any remote controller of a corresponding wide-area lighting system according to the database of events or conditions at the off-site central controller so that the database of the central controller, can control one or more functions of arrays of remote, widely dispersed lighting system (Col.11, Lines 20-64, Col.12, lines 17-30, Fig.1 and Fig.2 show the lighting control computer as read on central controller that communication from transceiver 20 to remote control unit 16 wherein corresponding to lighting system).

**Alt fails to explicitly teach**

i. a plurality of arrays of lighting fixtures;  
ii. each array comprising a set of high intensity light sources and ballast circuits adapted to be switched to connect or disconnect to a relatively high voltage power source.

In an analogous art, **Gordin teaches**

i. a plurality of arrays of lighting fixtures (Col. 8, Lines 47-50, Fig.1 and Fig.9

Illustrate lighting array frame wherein contain plurality of luminaries unit light) ;

ii. each array comprising a set of high intensity light sources and ballast circuits adapted to be switched to connect or disconnect to a relatively high voltage power source (Col. 4, Lines 40-57 teach the power source on board generator 16 with provide electric power to luminaries unit light through ballast 20 wherein contain power switching circuit 40 for turning or switching on and off which read on switched to connect or disconnect to a relatively high voltage power).

Therefore, it would have been obvious at the time that the invention was made to modify Alt with Gordin's system, such that controlling wide area lighting at plurality different site to be illuminate by using central control system from off site to provide means for the convenient and saving cost by controlling lighting in different location without sending out technician to adjust or setup timing, scheduling.

Regarding **claims 2, 16, 46 and 54**, the combination of Alt and Gordin teach the apparatus of claim 1. Further, Alt teaches wherein the database comprises a schedule of events (Col.10, Lines 5-30 control unit received programming as read on schedule of events).

Regarding **claim 4**, the combination of Alt and Gordin teach the apparatus of claim 1. Further, Alt teaches wherein the network device is computers or network of computers (Fig.2, Illustrate No.21 and described).

Regarding **claim 5**, the combination of Alt and Gordin teach the apparatus of claim 1. Further, Alt teaches wherein the remote device comprises a digital controller (Col.13, Lines 46-65).

Regarding **claims 8, 19 and 48**, the combination of Alt and Gordin teach the apparatus of claim 1. Further, Gordin teaches wherein the wide-area lighting device comprises sports lighting or security lighting (Col.1, lines 17-18, and Fig.1 show lighting device 10 which would lead to one skill to take into account that can be used for sport event or security lighting or any activity in night time).

Regarding **claims 10, 24, 25 and 49**, the combination of Alt and Gordin teach the apparatus of claim 1. Further, Alt teaches wherein the communications link comprises a wide area network (Col. 3, Lines 13-20).

Regarding **claims 13, 17, 18, 20 and 50**, the combination of Alt and Gordin teach the apparatus of claim 1. Further, Alt teaches wherein the remote device includes a cellular receiver (Col. 12, Lines 38-47, Fig.2, Illustrate wireless transceiver between lighting control computer 21 having antenna 20/122 communicated (wireless) with control unit 16 having antenna 30/120).

Regarding **claim 14**, the combination of Alt and Gordin teach the apparatus of claim 1. Further, Alt teaches wherein said data comprises instructions (Col. 10, Lines 5-8 teach programming as read on instructions).

Regarding **claim 15**, the combination of Alt and Gordin teach the apparatus of claim 1. Further, Alt teaches wherein said instructions include one or more of the set comprising turn on, turn off (Col.10, Lines 5-20).

Regarding **claims 21, 22 and 23**, the combination of Alt and Gordin teach the apparatus of claim 1. Further, Alt teaches comprising a component to revise said database (Col.3, lines 50-61, Col. 10, Lines 5-8, Col. 11, Lines 10-25 teach programming send to billboard daily at certain time and reference events (standard time to daylight saving time as read on revise) which widely divergent location to operate in according with individual protocol assigned to each billboard sign which is broadly read and met the claim limitation).

Regarding **claim 51**, the combination of Alt and Gordin teach the system of claim 45. Further, Alt teaches wherein said data relates to instructions regarding the operation of an electrical load (Col. 6, Lines 30-41, 60-67, Col.10, lines 5-20 teach the control

system such as lighting controlling computer communicated with the control unit by transmitting program instruction regarding operation of billboard light or electrical load).

Regarding **claim 52**, the combination of Alt and Gordin teach the system of claim 45. Further, Alt teaches wherein the customer device is related to one or more of the set comprising cellular phone, internet connected computer, fax machine, and telephone (Col.12, Lines 38-47, Fig.2, No. 22).

Regarding **claim 53**. The combination of Alt and Gordin teach the system of claim 52. Further, Alt teaches "wherein the customer device communicates schedules related to operation of the lighting devices (Col.3, lines 55-67 teach billboard light belong to "owner" as read on consumer device that want to continue scheduling the operation of lighting the device or not until the new advertise secure)

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KIET DOAN whose telephone number is (571)272-7863. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kiet Doan/  
Examiner, Art Unit 2617

/Charles N. Appiah/  
Supervisory Patent Examiner, Art Unit 2617